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FIRMATION NO.	ATTORNEY DOCKET NO.	FIRST NAMED INVENTOR	FILING DATE	APPLICATION NO.
CHAN3232/EM 1606		Ming-Cheng Chang	11/24/2003	10/718,666
EXAMINER			90 01/14/2005	23364 759
	ACON & THOMAS, PLLC KANG, DON		BACON & TH	
PER NUMBER	ART UNIT			625 SLATERS I
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-	2811 DATE MAILED: 01/14/2005			ALEXANDRIA

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. Applicant(s) Applicant(s) Applicant(s) CHANG, MING-CHENG Examiner Conghee Kang 2811 Change At Unit Conghee Kang 2811 Change 2811 C				1/2/			
## Examiner ## Donghee Kang ## 2911 ## The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. • Enteration of time may be available under the provisions of 37 CPR 1.708(a). In no event, however, may a reply be timely filled of the correspondence is less than thing (30) days, a reply within the didutary minimum of thing (30) days will be considered timely. • If the period in reply a specified above, he maximum distinctor period will apply and will apply 50 (MoNNTS from the mailing data of this communication. If the period control is the shall him; (30) days, a reply within the distinctor period will apply and will apply 50 (MoNNTS from the mailing data of this communication. If the period period term adjustment. See 37 CPR 1.704(b). ### Responsive to communication(s) filled on 24 November 2003. ### 2003		Application No.	Applicant(s)				
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2a) ☐ This action is FINAL. 2b) ☑ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☑ Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) is/are objected to. 8) ☐ Claim(s) is/are objected to. 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Application Papers 9) ☐ The specification is objected to by the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☐ Notice of References Cited (PTO-82) 2) ☐ Notice of Informal Patenn Application (PTO-143) Paper No(s)/Mail Date	Status		•				
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Application/Control Number: 10/718,666

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Perng et al. (US 6,090,661).

Re claim 1, Perng et al. teach in Figs.1 a deep trench structure of semiconductor device, said semiconductor device having a plurality of active areas (1 & 3), said deep trench structure (19) characterized in that said deep trench communicates with two different active areas. See also Col.5, line 6-Col.6, line 24.

Re claim 2, Perng et al. teach the cross section of said deep trench communicates with two different active areas.

Re claim 3, Perng et al. teach said two different active areas communicated by said deep trench are respectively connected with two adjacent bit lines.

Re claim 4, Perng et al. teach a semiconductor memory device comprising (Fig.1):

A plurality of bit lines; aplurality of gates crossing with said bit lines; a plurality of active areas, each of which is connected to one of said bit lines; a plurality of deep trenches, at least one of which communicates with two different active areas. See also Col.5, line 6-Col.6, line 24.

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Re claim 5, Perng et al. teach the cross section of said deep trench communicates with two different active areas.

Re claim 6, Perng et al. teach said two different active areas communicated by said deep trench are respectively connected with two adjacent bit lines.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghee Kang whose telephone number is 571-272-1656. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C. Lee can be reached on 571-272-1732. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donghee Kang, Ph.D. Primary Examiner Art Unit 2811

Comproble

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